



USE OF EVAPORATION UNITS

Technical Guidance Document HW 95-03

The following guidance is provided for the management of hazardous waste in evaporation units. When hazardous waste is evaporated, there is a strong potential for contaminants to be moved from one media (liquid waste) to another media (ambient air). A generator using evaporation may reduce the volume of the liquid but contaminate the air and surrounding area. If evaporation is allowed to reduce the volume of hazardous waste and/or to conduct waste minimization, it is very important that the evaporation process be operated to insure contaminants are not allowed to enter the air and present a danger to public health and the environment.

The need to address air emissions is evident in recent changes in both state and federal regulations. For example, new rules found in the December 6, 1994 Federal Register regulate volatile organic emissions (VOCs) from containers, tanks, and surface impoundments at hazardous waste generator sites and treatment, storage, or disposal (T/S/D) facilities. In addition, new rules found in the January 25, 1995 Federal Register bring chromium electroplaters under a new standard for limiting hazardous air pollutant (HAP) emissions.

In reviewing the existing state and federal regulations, it has been determined that **evaporation of a hazardous waste** would meet the definition of "treatment" found in 40 CFR, Part 260.10. However, evaporation units can be operated under the following conditions:

1. The evaporation unit is a sludge dryer that is part of a wastewater treatment system operating under a wastewater treatment exemption and meets the definition in 40 CFR, Part 260.10; or

2. The evaporation unit meets the definition of a "totally enclosed treatment system" as defined in 40 CFR, Part 260.10. Additional clarification by the Environmental Protection Agency (EPA) on this definition will be provided by request.

If the evaporation unit does not meet the requirements of conditions 1 or 2 above, the unit is a thermal treatment unit and is subject to the permit requirements of Part 264, Subpart X (or the interim status requirements of Part 265).

In the operation of any of these evaporation units, no hazardous waste constituents will be allowed to be emitted into the air. It is the responsibility of the generator to insure he or she is meeting these requirements by controlling and/or monitoring the emissions of the evaporation unit.

The Bureau of Waste Management requests that all proposals regarding evaporation units be reviewed by the department prior to purchase or installation to help determine if the evaporator will meet the criteria outlined in this guidance document.

Questions regarding evaporation should be directed to the Technical Support Section, Bureau of Waste Management at (785) 296-1604. Questions regarding VOC or HAP air emissions should be directed to the Air Permit Section, Bureau of Air and Radiation at (785) 296-1579.

For additional information regarding the proper management of solid waste, you may contact the Bureau of Waste Management at (785) 296-1600 or at the address at the top of this document.